DOCKET NO.: 0059-1219-0X

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

Kazuyuki MURAKAMI et al : EXAMINER: VANOY, T. C.

SERIAL NO: 09/559,073 :

FILED: APRIL 27, 2000 : GROUP ART UNIT: 1754

CPA FILED: April 11, 2003 :

FOR: CARBONACEOUS MATERIAL, ITS PRODUCTION PROCESS AND ELECTRIC DOUBLE LAYER CAPACITOR EMPLOYING IT

LETTER SUBMITTING EXECUTED DECLARATION

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(S) respectfully submit the original executed Declaration under 37 C.F.R. §1.132 to replace the unexecuted Declaration under 37 C.F.R. §1.132 which was originally filed in the U.S. Patent and Trademark Office on May 15, 2003.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman F. Oblon
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DECLARATION UNDER 37 CFR 1.132

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

We, Kazuyuki Murakami and Yasuo Shinozaki, hereby make the following declaration:

1.(i) I, Kazuyuki Murakami, am one of the joint inventors of the above-identified application.

I am a graduate of Hokkaido University, Graduate School of Engineering, Department of Materials Science and Engineering, and received a Doctor degree in the year 1997.

I have been employed since 1998 by ADCHEMCO Corporation (the name of which was changed to JFE Chemical Corporation on April 1, 2003), and engaged in research in development of high capacitance capacitor materials, development of lithium ion secondary cell negative electrode materials, development of separator materials, sophistication of pitch

(isotropic pitch, novel crosslinked pitch) and the like.

The following experiment was carried out by me or under my direct supervision and control.

(ii) I, Yasuo Shinozaki, am one of the joint inventors of the above-identified application.

I am a graduate of Waseda University, Faculty of Resource and Metal Engineering, Department of Metal Engineering and received a Master degree in the year 1984.

I have been employed since 1984 by Asahi Glass Company, Limited, and engaged in research in aluminum alloys (1984-1986), in research in boride type heat resistant alloys (1987-1995), in research in tantalum electrolytic capacitors (1996-1997) and in research in activated carbon for electric double layer capacitors (1998-2001).

The following experiment was carried out by me or under my direct supervision and control.

2. The experiment was carried out as follows.

A follow-up of the cited reference JP-06-216446 was carried out in accordance with Experiment 1 of the reference.

Hexamethylenetetramine as a curing agent was added to a powder novolak type phenol resin, followed by mixing by a vertical mixer for 45 minutes, and the mixture was subjected to a heat treatment at 160°C for 2 hours for curing, and the cured product was ground by a jaw crusher to adjust the particle size to be from 1 to 3.35 mm. The obtained particles were subjected to a heat treatment in nitrogen gas at 900°C for 30 minutes for carbonization. The particles were cracked by a coffee mill to adjust the particle size to be from 0.6 to 2 mm, and the particles were subjected to a

heat treatment in carbon dioxide gas at 900°C for 1 hour to carry out a first activation treatment to obtain activate carbon having a specific surface area of 735 m^2/g. The yield was 89.2%.

The activate carbon was ground by a dry ball mill to adjust the average particle size to be 7 μm. 15 parts by weight of a phenol resin, 8 parts by weight of ethanol and 20 parts by weight of creosote as binders were added thereto, and the mixture was kneaded and pressed at a pressure of 500 kg/cm^2 to obtain a mold plate in the form of $50 \times 50 \times 1$ (mm). This was heated in nitrogen gas at a heating rate of 100°C/h to 900°C and maintained for 30 minutes for carbonization, and then subjected to a heat treatment in carbon dioxide gas at 800°C for 10 hours to carry out a second activation treatment. The yield from the second activation was 83%, and the total activation yield was 74%. The BET specific surface area of the formed body was 738 m^2/g.

The pore size distribution of the obtained activated carbon was measured, and the results are shown in Table 1. In Table 1, the ranges of the pore size distribution of Claim 17 of the present invention are also shown. From the results, it is found that the volume of pores having diameters of from 20 to 200Å is outside the range of Claim 17 of the present invention. The pore size distribution of Example 1 of the present invention and the pore size distribution of the follow-up of Experiment 1 of the reference are shown in Fig. 1 for reference.

Here, Experiment 1 was selected among Experiments of the reference, because detailed explanation of Experiment 1 is given, and it is considered that there is substantially no difference in the pore size distribution between Experiment 1 and the other Experiments of the reference, and that the volume of pores having diameters of from 20 to 200Å of the other Experiments are also outside the range of Claim 17 of the

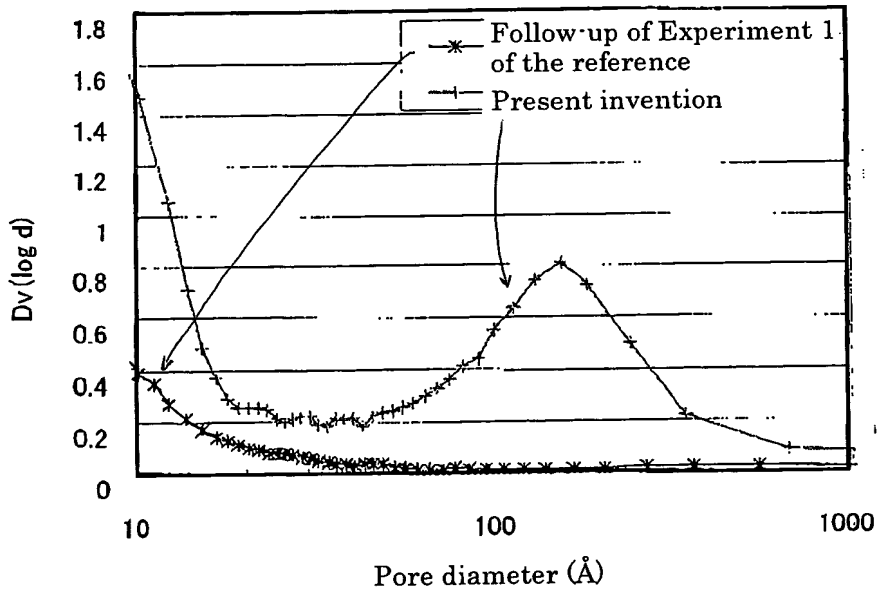
present invention.

Table 1

	Claim 17 of the present invention	Follow-up of the reference
Volume of pores having diameters of from 10 to 20Å	10－45%	27%
Volume of pores having diameters of from 20 to 200Å	35－65%	15%
Volume of pores having diameters exceeding 200Å	At most 20%	9%

* In follow-up of the reference, most pores have diameters less than 10Å.

Fig. 1



3. The undersigned petitioners declare further that all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

4. FURTHER DEPONENT SAITH NOT.

Kazuyuki Murakami
Signature / Kazuyuki Murakami

May 28, 2003
Date

Yasuo Shinozaki
Signature Yasuo Shinozaki

May 22, 2003
Date

#2

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P.C.

ATTORNEYS AT LAW

Docket No.: 0059-1219-0X

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 09/559,073
Applicants: Kazuyuki MURAKAMI, et al.
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Group Art Unit: 1754
Examiner: VANOY, T.C.

SIR:

Attached hereto for filing are the following papers:

LETTER SUBMITTING EXECUTED DECLARATION
DECLARATION UNDER 37 CFR 1.132 (EXECUTED)

Our check in the amount of **$0.00** is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

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